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## **BURGERS!**

### **ENTERTAINMENT**

The generic grilled ground beef sandwich game  
(in the classical style)  
(for pre-school age and up)

by Douglas Crockford

Requires: One set of ATARI Paddle Controllers

Cassette version (1)  
(APX-10263)

ATARI 410 or 1010  
Program Recorder  
24K RAM

Diskette version (1)  
(APX-20263)

ATARI 810 or 1050  
Disk Drive  
24K RAM

Edition A

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# BURGERS!

## The Generic Grilled Ground Beef Sandwich Game

(in the Classical Style)

by

Douglas Crockford

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## Introduction

### OVERVIEW

It's everywhere. Television. Radio. Mail. Billboards. Magazines. The store on the corner. A brightly colored piece of litter bearing a large corporate logo and the words "Put litter in its place."

The clown could be selling anything, but in this case it's burgers. Each message makes you want another, unless you concentrate your energy to resist. And be warned: the advertiser grows more persistent in response to your resistance.

Imagine a world where you're bombarded with hamburgers and cheeseburgers -- either you zap them or you consume more and more.

Using your paddle, you control a figure at the top of the screen that moves from side to side. Burgers float upwards, and you shoot rays down at them. The small ones disappear, but sometimes big ones break apart into smaller ones. You absorb each burger that touches you, making your figure grow gradually wider. If it's too fat to move, it pops, and you start over.

Your score, recorded as how many burgers sold, mounts quickly as you zap the burgers. When you complete a level over 10,000 points, a huge burger covers the screen. It's so life-like, with its crinkly lettuce and juicy tomato, that you might just want to admire it -- but the best strategy is to fire away at it.

A catchy song plays throughout the action, and play continues as long as you want to keep trying.

## REQUIRED ACCESSORIES

One set of ATARI Paddle Controllers

Cassette version

ATARI 410 or 1010 Program Recorder  
24K RAM

Diskette version

ATARI 810 or 1050 Disk Drive  
24K RAM

## CONTACTING THE AUTHOR

Users wishing to contact the author may write  
to him at:

586 Dublin Way  
Sunnyvale, CA 94087

Keep those postcards and letters coming in!

## Getting started

### LOADING BURGERS! INTO COMPUTER MEMORY

1. Remove any program cartridge from the cartridge slot of your computer.
2. Plug your ATARI Paddle Controllers into the first controller jack of your computer console.
3. If you have the cassette version of BURGERS!:
  - a. Have your computer turned OFF.
  - b. Turn on your TV set.
  - c. Insert the BURGERS! cassette into the program recorder's cassette holder and press REWIND on the recorder until the tape rewinds completely. Then press PLAY to prepare the program recorder for loading the program.
  - d. Turn on the computer while holding down the START key.
  - e. When you hear the beep, release the START key and press the RETURN key. The program will load into computer memory and start automatically.

### If you have the diskette version of BURGERS!:

- a. Have your computer turned OFF.
- b. Turn on your disk drive.
- c. When the BUSY light goes out, open the disk drive door and insert the BURGERS! diskette with the label in the lower right-hand corner nearest to you. Close the door. (Use disk drive one if you have more than one drive.)



d. Turn on your computer and your TV set.  
The program will load into computer memory  
and start automatically.

## THE FIRST DISPLAY SCREEN

When **BURGERS!** has loaded into computer  
memory, the screen looks something like this:

**BURGERS!**  
by  
Douglas Crockford  
Copyright 1983

**SOLO      LEVEL 1**

The title, author's name, and copyright notice  
move across the screen from left to right.

## Making choices

### DIFFICULTY LEVEL

Press the OPTION key to change the level of difficulty. Level 1 is the easiest, and level 4 is the most challenging.

### NUMBER OF PLAYERS

Press the SELECT key to change between SOLO play and DUET play. In SOLO play, only the left paddle moves the figure on the screen. (But the fire buttons on both paddles are active.) In DUET play, both paddles can move the figure. Each paddle has fine control over half the court. Movement over the entire court is possible only with cooperation between the two players. The fire buttons on both paddles are active.



## Playing BURGERS!

When you're ready to play, press the START key. The first wave of burgers lines up across the lower part of the screen, and slowly floats upward and to the right and left.

Turn the paddles to move the figure at the top of the screen to the left and right. The figure doesn't move when you're holding down either of the fire buttons.

Each paddle has a fire button, which is usually red. If the program is on the title screen, you can press either fire button to start the game.

At the bottom of the screen, the word "SOLO" or "DUET" appears, next to the level you've chosen. The number of the wave appears at the right. The program displays the score as follows: "OVER 326 SERVED".

Shoot everything in sight for big points! You get a deathray, which instantly destroys anything in its path. You have only two restrictions. You can't move while the fire button is down. Also, when a burger is vaporized, it leaves a cloud that temporarily blocks the ray.

The deathray is a powerful weapon. It's very forgiving about aim and timing. Watch out: when you hit a large burger, it splits into two smaller ones!

Each time a new wave begins, the burgers line up at the bottom of the play screen. As the number of the wave increases, more and bigger burgers appear. If your figure has gotten wider during one wave, you notice it's smaller when you successfully complete the wave. But if it gets so big that it pops, the words "GAME OVER" appear on the screen with your score, and you have to start a new game.

The fifth wave features an interesting pattern on the screen. The burgers trace contrasting paths in the background as they float about the screen.

There's a bonus when you finish the wave during which you've scored your first 10,000 points. A large, vivid burger, garnished with lettuce, tomato and cheese, appears on the screen. You shoot at it until the deathrays have penetrated through the top of the bun down to the inside layers. This happens fast! Then the game resumes. The giant burger reappears each time your score exceeds another 10,000 points.

## Designer's notes

What follows are observations on games and computers. You don't have to read any of this in order to have a good time with BURGERS!

The following represents the views and opinions of the author of BURGERS!, and doesn't necessarily represent the opinions of any other person or institution.

This is definitely the best part in putting together the manual. It's my chance to step out from behind the screen and say "Hi, how's it going?"

## CLASSICAL STYLE

BURGERS! is a game in the classical style. This refers to games from the Golden Age, such as Space Invaders and Asteroids, which were easy to learn, easy to play, and tough to master.

This simplicity is rare in modern games. The games products have been increasingly focusing on their primary audience: young males with a serious surplus of quarters. As a result of this focus, games have become very complex and, for many people, unplayable.

This greatest classical games, Pac Man for example, attracted new audiences. The legions of followers merely fractionalized existing audiences.

When I go into an arcade, it is usually as a spectator. I like to see what's new, and I like to watch someone playing a good game. But when it comes to investing my own quarter, I'll put it in an old-fashioned game like Galaxians or Centipede.

## PROGRAMMING

Programming is the best video game. It is challenging, involving, and immediately rewarding.

The next time you evaluate a video game, try to determine if the author had a good time, or if the effort was tortured. I think it shows. The game that was fun to write is more likely to be fun to play.

Game programming is still very difficult, and that is why most games are done by hackers and engineers. Some day it should be easy enough for anyone to do it. (That is what I am working on.) Don't believe anyone claiming to have cornered the market on game design. Given half a chance, you could do better.

I strongly recommend programming to anyone who thinks it might be fun. There is a serious danger, though, of turning into a basement-type or computer nerd. DON'T LET IT HAPPEN TO YOU. Program in moderation.

## BURGERS! PART ONE

I had the design for BURGERS! worked out before I came to Atari. It occurred to me while I was doing research in Office Automation. I was reflecting on the notion of work, and of badly automation-assisted jobs, when I suddenly flashed on the game as a sort of satirical cartoon on the problems I saw.

If offices are automated badly, as the OA vendors are inclined to do it, then the whole idea of what useful work is gets all twisted around. People would be doing electronic piece work on the information flowing through their terminals.

I compared that to working on the grill at a fast food restaurant. you lay out an array of patties. You flip them over. You put them on buns and assemble the hamburgers. Then you do it again. If you get good at it, then you work the lunch rush, where you must work faster. It's like Space Invaders, with a spatula instead of a laser base.

The final game is almost exactly as I had pictured it. The major difference is in the way the burgers move. I had originally planned on having some clever algorithms (or what some people mistakenly call AI, or Artificial Intelligence) to direct the burgers in flight. In order to do intermediate testing, I put in a simple random algorithm so that I could see how the burgers moved. It performed better than the complex methods, so I left it that way.

## BURGERS! PART TWO

My first play-tester was my daughter, Jane, who is three. I used paddles because joysticks are too hard for little kids to use. So that she could have fun with it, I made it impossible to lose on the first wave, nearly impossible on the second.

Another consideration for Jane was that nothing dies. I don't know if it really matters, but I'd rather have her playing games that are not death-oriented. That's also why the persona doesn't resemble a weapon, and why it doesn't die or give up lives. It just changes state.

## BURGERS! PART THREE

(This section uses 800 jargon.)

The playfield is graphics mode E. The burgers are playfield objects, not players. The clouds are players. The deathray is a missile. The



persona is four missiles.

Two of the audio channels are reserved for music, the other two for sound effects. The music is completely integrated into the game play. It is never cut short or interrupted. One of the music channels is sent up an octave when the deathray is on. The music was written to suggest advertising jingles. (At one point I used the chapel music from Galahad and the Holy Grail.)

The playfield was a single buffer. The erase/draw routines were synchronized with VCOUNT to reduce flicker. When there are many burgers on the screen (there can be as many as 128) it can take more than one field to do an update. Even so, the action doesn't get jerky because the persona is always updated every field, and that is where your attention is usually focused.

I did not use a vertical blank interrupt. I did use several display-list interrupts for those things requiring real-time attention.

I want to thank the many friends who encouraged me. I wouldn't have finished it without you. Thank you all. It was fun.



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## Review Form

We're interested in your experiences with APX programs and documentation, both favorable and unfavorable. Many of our authors are eager to improve their programs if they know what you want. And, of course, we want to know about any bugs that slipped by us, so that the author can fix them. We also want to

know whether our instructions are meeting your needs. You are our best source for suggesting improvements! Please help us by taking a moment to fill in this review sheet. Fold the sheet in thirds and seal it so that the address on the bottom of the back becomes the envelope front. Thank you for helping us!

1. Name and APX number of program.

Burgers! (263)

2. If you have problems using the program, please describe them here.

3. What do you especially like about this program?

4. What do you think the program's weaknesses are?

5. How can the catalog description be more accurate or comprehensive?

6. On a scale of 1 to 10, 1 being "poor" and 10 being "excellent", please rate the following aspects of this program:

- \_\_\_\_\_ Easy to use
- \_\_\_\_\_ User-oriented (e.g., menus, prompts, clear language)
- \_\_\_\_\_ Enjoyable
- \_\_\_\_\_ Self-instructive
- \_\_\_\_\_ Use (non-game programs)
- \_\_\_\_\_ Imaginative graphics and sound

7. Describe any technical errors you found in the user instructions (please give page numbers).

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8. What did you especially like about the user instructions?

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9. What revisions or additions would improve these instructions?

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10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

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11. Other comments about the program or user instructions:

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From

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